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Staff nurse perceptions of work environment : a comparison of nurses who left their unit and nurses who stayed

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STAFF NURSE PERCEPTIONS OF WORK ENVIRONMENT: A COMPARISON OF NURSES WHO LEFT THEIR UNIT AND NURSES WHO STAYED

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ABSTRACT

Staff Nurse Perceptions of Work Environment:

A Comparison of Nurses Who Left Their Unit and Nurses Who Stayed

by Diane L. Stuenkel

This thesis examines the differences in the background characteristics of age, years in nursing, salary, and educational level between nurses who left their unit (n=34) and nurses who remained on their unit (n=171). A self-report questionnaire developed by the primary researchers collected data on the background characteristics. The only statistically significant difference found between groups was for salary, z = 2.06, p = .04. The stay group's hourly salary averaged $1.28 more than the leave group. The Insel and Moos Work Environment Scale-Form R was also administered to measure perceptions of work environment. No statistically significant differences were found between groups for perceptions of work environment. However, the groups differed from the normed average range, and from each other, on several subscales. Recommendations for future research and applications to nursing practice are included.

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Chapter 1

INTRODUCTION

Background

Nurses employed in the acute care setting are faced with an increasingly complex work environment. Technological advances, high patient acuity, shift and unit rotations, and changes in staffing patterns all contribute to a work environment that has been described as chaotic (Crow & DeBourgh, 1992). Factors such as the physical attributes of the workplace, autonomy, and peer support all influence the perception of work environment (Moos, 1989). A nurse's perception of his or her work environment may be a contributing factor in the decision to stay or leave a place of employment (Quint, 1992).

The fiscal impact of hiring and training new nurses is staggering. In 1990, estimated costs to hire and train a new critical care nurse reached $20,000 (Coleman, 1990). Hospitals are now investigating new ways to retain these valuable human resources. A New York hospital implemented a program designed to assist new graduates in their transition from student to nurse. Because this program helped the novice nurses successfully adjust to their new work environment, this institution retained their trainees and substantially decreased their replacement costs (Anderson, 1989).

Costs associated with nursing turnover include direct and indirect costs. Jones (1990a, 1990b) identified the direct costs as expenditures dealing with advertising and recruiting, staffing unfilled positions, and hiring new nurses. The indirect costs are related to termination, orientation and training, and decreased

productivity of the newly hired nurse. Measurement of these costs were done in four southeast hospitals. Nursing turnover costs were approximately 11% of the total annual nursing salaries.

There are benefits related to nursing turnover for nurses and management (Curran & Miller, 1990). One of the financial benefits to the health care facility may be the addition of new team members with a variety of education and experience at lower salaries than the employees they are replacing (Jones, 1990a). However, the current economic downturn and escalating health care costs require hospitals to function economically. Due to these economic forces, health care agencies must seriously examine the human resource element in an effort to creatively control health care costs. Shifting the priority from recruitment to retention is one means of controlling nursing turnover and its associated costs. By focusing on its human resources, acute care hospitals may reap financial benefits from the retention of experienced, motivated, and satisfied employees (Gray, 1992b).

Problem

Staff nurses' perceptions of their work environment may affect their overall satisfaction with their place of employment and may be a factor in their decision to stay or leave their unit or hospital (Quint, 1992). Helmers and McKnight (1988) relate the nursing practice environment to the recruitment and retention of nursing staff. Factors in the work environment that were important to this group of registered nurses (RNs) were staffing, scheduling, supervisor support, educational opportunities, and participation in management. Identifying specific areas of the work environment that are related to staff RNs decisions to stay or

leave their facility may enable administrators to change or strengthen positive aspects of the work environment to retain nursing staff.

Doering (1990) suggested that identifying factors affecting the work environment such as management style, perceptions of isolation, stress, and burnout can lead to the development of successful recruitment and retention strategies. Several hospitals are already focusing on the work environment itself as a prime retention strategy (Gray, 1992b). One urban hospital improved the work environment of its nurses by implementing changes in the desicion-making process, developing a rewards and recognition program, and the addition of educational incentives (Townsend, 1991). This improved work environment led to an increase in job satisfaction. By maintaining and fostering the development of experienced, loyal staff nurses, acute care facilities can minimize expenditures for recruitment, hiring, and orientation costs.

Purpose

The purpose of this study was to compare the RNs who left their unit/hospital with the group of RNs who remained employed on their unit. First, the two nurse groups were compared on the basis of age, years in nursing, salary, and educational level. Next, the RN groups were examined for differences in their perceptions of work environment as measured by the Insel and Moos Work Environment Scale (WES).

Research Questions

Two research questions were addressed in this study.

1. Is there a difference in the background characteristics between staff nurses who leave the unit or hospital and those who stay?

2. Is there a difference in perceptions of work environment between staff nurses who leave their unit or hospital and those who stay?

Definition of Terms

1. Work environment is the social climate of the work setting as defined by Moos (1989). The social climate of the work environment is "the personality of a work setting . . . that gives it unity and coherence" (Moos, 1989, p. 1). This work environment is influenced by factors such as involvement, peer cohesion, supervisor support, autonomy, task orientation, work pressure, clarity, control, innovation, and physical comfort. These elements comprise the subscales of the instrument used in the study and are further defined in that section.

2. Staff Nurse is a person licensed by the State of California as a registered nurse (RN) who provides direct patient care. Staff RNs included in this study were nurses at the assistant head nurse level down to the entry level RN.

3. Background characteristics are the specific demographics collected and examined in this study. The background characteristics selected for examination in this portion of the study were age, years in nursing, salary, and educational level.

Summary

By identifying factors within the work environment that may influence a staff RN's decision to stay or leave the unit/hospital, new retention strategies could be developed. Improving weak areas and strengthening positive factors in the work environment may lead to the improved retention of staff nurses. Besides the financial gains in lower hiring and training costs, the retention of trained,

competent, and caring RNs may improve the quality of patient care and increase consumer satisfaction.

Chapter 2

REVIEW OF RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

Related Literature

Nurses have always considered the environment in their quest for quality patient care. Florence Nightengale first identified a clean, light, well-ventilated environment to be conducive to a patient's welfare in the 1800s (Marriner, 1986). Contemporary nursing theorists define environment in many different ways and it has become apparent that the same environment that affects the patient also places demands on the nursing staff (Marriner, 1986).

The acute care environment has become increasingly complex due to rapid technological advances and high patient acuity. This work environment has been described by Crow and DeBourgh (1992) as chaotic and can adversely affect the nurse's job performance. These authors propose using a systems/education/compliance model (SEC) to bring order to this work environment. Stechmiller and Yarandi (1992) examined job satisfaction among critical care nurses and state that dissatisfaction may be reflected by increased absenteeism, increased turnover rates, and unsatisfactory job performance. Their study identified several variables which significantly affected job satisfaction. These included task identity, meaningfulness of work, dealing with others at work, and the opportunity for advancement. Caine (1990) noted the relationship between nurses' decreasing job satisfaction and high attrition rates among new critical care nurses. Fostering mentoring relationships among new

critical care nurses and experienced critical care nurses has resulted in increased job satisfaction. This increased level of satisfaction may lead to greater productivity and cost savings for the health care facility. Anderson (1989) identified peer group cohesiveness as a factor in medical-surgical nurses' perceptions of job satisfaction. In this study the implementation of a Nurse Advocate program for new graduates helped acclimate the beginning RNs to their work environment. Only one RN was lost through attrition the first year, reducing the hospital's replacement costs significantly.

In an attempt to develop a means of predicting which RN will be most likely to leave a particular hospital, Choi, Jameson, Brekke, Anderson, and Podratz (1989) examined the effect of job dissatisfaction on intent to leave the hospital or nursing profession. One of their hypotheses was that lack of control related to an RN's work schedule affects job dissatisfaction and retention. Findings supported the view that the higher the degree of job dissatisfaction, the more likely a change of employment.

Altering specific areas of the hospital work environment can result in increased job satisfaction. Townsend (1991) surveyed RNs at one hospital to measure satisfaction, communication issues, staff development opportunities, and peer support. Implementing changes in the decision-making processes, adding educational incentives, and developing a rewards and recognition program led to positive changes in the work environment and an increase in job satisfaction.

The work environment of the nurse was the focus of a 1981 study by the American Academy of Nursing (Helmers & McKnight, 1988). The study

determined that the nursing practice environment was related to the recruitment and retention of nurses. Several factors in the work environment were of importance to RNs including staffing, scheduling, supervisor support, educational opportunities, and participation in management. Gray (1992b) highlights several hospitals that are implementing retention strategies aimed at improving and professionalizing the RN's work environment. Increasing staff RN autonomy, supervisor support, educational opportunities, and involvement in organizational decision-making are some of the ways this is being accomplished.

Conceptual Framework

Rudolph Moos has examined the work environment in a variety of work settings, including different health care facilities. His work provides the conceptual framework for this study. The work environment as defined by Moos (1976) includes all the conditions, situations, and influences surrounding and affecting employees in their work settings. This work environment may be influenced by external and internal pressures. The work environment is also defined as the personality or social climate of the work setting. The social climate of the work setting can have a major impact on morale, productivity, and the ability to cope with stressors faced in the work place and at home (Moos, 1989).

Moos' (1976) model of the Relationship of Organizational Factors to Organizational Impact utilizes systems theory and concepts from several organizational theories. Moos' work focuses on how organizational factors, the role and role concomitants, and the background of the employees affect the social climate of the work place. The social climate is both a result of the surrounding environmental stimuli and a contributing factor affecting the work

environment. The social climate of an organization is fluid and changes in response to alterations of the work environment at various levels.

Moos' organizational factors refer to the structure and change dimensions of an organization. Role and role concomitants apply to the employee's job clarification and the duties and responsibilities that are included in that position. The average background and personality characteristics of an organization depend on the employees themselves. Both role differentiation and whether the staff consists of a homogeneous or heterogeneous group of employees will contribute to the organization's social climate. Employees finding a place of employment conducive to a good employee-environment fit tend to be satisfied, productive employees. A change in the social climate of the work environment may effect a change in the type of employee the organization attracts.

Moos (1976) has identified specific factors contributing to the social climate as described in the following paragraphs. The three areas, or dimensions, affecting the work environment are the Relationship Dimension, the Personal Growth or Goal Orientation Dimension, and the System Maintenance and System Change Dimension. These dimensions include 10 subscales which are measured by using the Work Environment Scale (WES), the tool used in this study.

The Relationship Dimension acknowledges that inter-personal relationships among employees have an impact on the social climate of an organization. The subscales of involvement, peer cohesiveness, and supervisory support measure these aspects of relationships within the work environment. These subscales take into consideration the level of job commitment exhibited by employees, the interest employees have in each other, and the approachability of supervisors.

The Personal Growth or Goal Orientation Dimension is made up of three subscales: autonomy, task orientation, and work pressure. The degree of freedom employees have in decision-making, efficiency, and sense of time urgency are examined by these subscales.

The final dimension, System Maintenance and System Change, is comprised of four subscales: clarity, control, innovation, and physical comfort. Clarity seeks to assess the degree of understanding employees have regarding their job expectations. The rules, regulations, policies and procedures of an organization and how they are implemented by management are issues of control. The innovation component is manifested by organizations that value variety, change, and new approaches. Physical comfort pertains to the employees' perception of the work place as being pleasant or unpleasant. Factors such as lighting and decor can influence this perception.

Moos has done extensive research on work environments using the Work Environment Scale (WES) to measure these various dimensions (Moos, 1987). Several of these studies were conducted in health care organizations. Use of the WES in the hospital milieu to identify areas of dissatisfaction among staff nurses can be a helpful tool for nursing administrators. By utilizing the WES results, strategies can be developed to address the specific areas of concern.

Turnipseed (1990) reports on the use of the WES at a hospital plagued with low morale, dissention between administration and employees, decreased productivity, and stress issues. These problems were viewed as symptoms and the WES was used to identify causative components in the work environment.

The results showed a lack of involvement, peer cohesion, supervisor support, autonomy, innovation, clarity, and physical comfort. A high perception of task orientation, work pressure, and control were demonstrated. Shift differences were also apparent. Recommendations for organizational changes included strategies for increasing nurse-administration communications, increasing involvement by the addition of special events attended by both employees and administrators, and reevaluating the scheduling policies.

A 1983 study by Koran, Moos, Moos, and Zasslow utilized the WES in a burn unit. The burn unit is known throughout the health care industry as a high stress area. Nurses working in these units have added stress associated with causing pain during debridement procedures. Patients are often dealing with a myriad of psychosocial issues and the nurse's emotional investment in the care of these patients is tremendous. The result is frequent turnover of nursing staff. The work environment was examined to identify areas requiring change to improve the overall morale and patient care. Along with the administration of the WES Form-R (i.e., realistic), the WES Form-I, which measures the perception of an idealistic work environment, was administered. The study showed a wide discrepancy between the perceived real work environment and the idealized work environment. Areas needing immediate intervention were identified as involvement, peer cohesion, supervisor support, and clarity. A liaison psychiatrist met on several occasions with the nursing staff to discuss pertinent work place issues and assist with problem solving. Post-intervention administration of the WES Forms R and I showed a positive change in the direction of the ideal work environment for 7 of the 10 subscales. Subjectively, morale was improved,

patient care more consistent, and nurse-physician communication increased after the intervention.

The American Association of Critical Care Nurses Demonstration Project (Mitchell, Armstrong, Simpson, & Lentz, 1989) was developed to document patient care outcomes and the costs associated with providing nursing care for critically ill patients. The WES was one of the instruments used in this study to examine factors in the work environment that could affect patient care outcomes. The RNs in the Demonstration Project had scores lower than the normed average range on work pressure and relatively high scores for peer cohesion, supervisor support, and autonomy. The authors conclude that "positive organizational and clinical outcomes coexisted with these desirable attributes" (Mitchell et al., 1989, p. 233). Although a cause and effect relationship cannot be inferred, a work environment where RNs are empowered to make decisions and feel supported by peers and administrators alike, may translate to better patient care and patient outcomes.

Neonatal intensive care unit RNs were the focus of a study by Moos (1986) using both Form R and Form I of the WES. These RNs rated their environment as high in task orientation and work pressure, and low in clarity, control, innovation, and physical comfort. By comparing their responses to the ideal work environment, several areas of dissatisfaction were identified. A lack of physical comfort in the work environment was one major issue.

Parkes (1982) also used the WES to evaluate the effects of work environment on student nurses. The Relationship Dimension of the WES was used, and performance and affective symptoms were also measured. Students were

assigned to various medical and surgical units which admitted either all-male or all-female patients. An increased perception of social support was related to increased performance for these student nurses.

Flarey (1991) reviewed the literature in which the WES was used to evaluate the work environments of nurses. Several of the studies outlined above were included, as well as a study conducted in an outpatient mental health facility. This review identified areas of interest to nurse executives in assessing the work environment and planning organizational changes focused on improving the work environment. Suggestions for use of the WES by nurse managers included assessing the current work environment, evaluating nursing administrators, planning and evaluating organizational change, and team development.

Summary

The work environment of the nurse has an impact on the nursing staff's productivity, morale, and job satisfaction. Use of the WES to evaluate the work environment of a health care facility has been a first step to implementing changes aimed at improving the work place. Improving the work environment offers nursing administration another retention strategy focused on improving job satisfaction and, ultimately, patient care.

Chapter 3

METHODOLOGY

Design

As part of a larger longitudinal study, this non-experimental, correlational study compared selected background variables between the group of staff RNs who left their unit or hospital over a 2-year period and the group of staff RNs who stayed. Background variables considered in this study were age, years in nursing, salary, and educational level. Staff RNs' perceptions of work environment were also examined for differences between the group of nurses who remained on their unit and the group of nurses who left.

This study was approved by the San Jose State University Institutional Review Board for Human Subjects and the participating agency prior to the initial data collection point.

Research Questions

Two research questions were addressed in this study. Is there a difference in the background characteristics between staff nurses who leave the unit or hospital and those who stay? Is there a difference in perceptions of work environment between staff nurses who leave their unit or hospital and those who stay?

Subjects and Setting

This study was conducted in an urban county hospital in the San Francisco Bay Area. The sample consisted of staff RNs who worked in all patient care areas and provided direct patient care. This included staff RNs from the Assistant Head Nurse level down to the entry level RN. Management level RNs,

those at the Head Nurse level and above, were excluded from the study. Units represented in this study include Transitional Care, Progressive Care, Surgical-Intensive Care, Medical-Intensive Care, Burn, Neurological, Coronary Care, Surgery, Medical/Surgical, Maternal/Child Health, and Pediatrics. Nurses employed in small specialty departments such as the Cardiac Catheterization Lab, Dialysis, and Ambulatory Care clinics were excluded from the study. The two specific groups compared in this study were the 34 staff RNs who left their original units or resigned from the hospital during the months of the study, and those staff RNs who remained on their original unit. Staff RNs who retired were not included in the group of RNs who left the unit or hospital. Two additional RNs who left their units were also excluded from the data analysis when their code numbers were not found in the data set.

Subjects indicated their informed consent with the return of the initial survey and were free to withdraw from the study at any time without penalty. Confidentiality of the subjects and their responses was maintained by identifying the staff RNs by name on a master list and assigning a code number to each staff RN and questionnaire. Follow-up data were coded by color and symbol. Subjects were assured at the initial data collection point that only aggregate responses and results would be reported. The master list matching subjects with the original questionnaires was secured under lock and key in the office of the primary investigators. Only the two primary investigators and graduate nursing students involved in the study had access to the data. No direct benefits or risks to the nurses participating in this study were identified.

Data Collection

Between July and October 1991 data were obtained from volunteer subjects for the first phase of the study. Nurses were recruited with the cooperation of the head nurses by volunteer graduate nursing students. The purpose of the study and the confidentiality of their responses were explained to the staff RNs. A total of 602 questionnaires were distributed at staff meetings and no compensation was awarded. The respondents to the original questionnaire yielded 207 volunteer subjects, a response rate of approximately 30%. Subjects were asked to complete a questionnaire regarding background characteristics as well as the Insel and Moos Work Environment Scale-Form R.

The second phase of the study collected retention data. At 6-month intervals (March 1992, September 1992, March 1993, September 1993) follow-up data listing current nursing staff by unit on a computer printout were obtained from the hospital's nursing administration. Transfers and resignations were tracked by this computer printout. Nurses whose names were no longer listed on the printout were noted, and nursing administration was contacted to determine whether the nurse resigned, transferred, or retired.

Instruments

A questionnaire on background characteristics collected information regarding age, years in nursing, educational level, salary, and other demographic characteristics. This self-report tool was developed by the primary researchers for use in this study. A copy of this instrument may be found in Appendix C.

Perceptions of work environment were measured by the Insel and Moos Work Environment Scale-Form R (WES). The WES-Form R (Realistic) measures perceptions of work environment based on subjects' responses to questions on

10 subscales. This version of the tool measures perceptions based on the current, or real, work environment. A copy is included in Appendix D. Other versions of the instrument measure the ideal work environment and what employees expect from their work environment. The 10 subscales are grouped into three sets or dimensions, the Relationship Dimensions, System Maintenance and System Change Dimensions, and Personal Growth or Goal Orientation Dimensions. These subscales are described below according to Moos (1989).

Relationship Dimensions

1. Involvement measures how connected the employee feels to his/her organization and the level of commitment to his/her job.

2. Peer Cohesion measures the support and relationships among colleagues.

3. Supervisor Support subscale measures the extent that employees feel supported and rewarded by their supervisors. This subscale also determines the degree of support that is present in the work environment among peers.

Personal Growth or Goal Orientation Dimensions

4. Autonomy relates to the employee being allowed to function independently, including decision making.

5. Task Orientation measures the facility's emphasis on organization, planning, and goal completion.

6. Work Pressure is the amount of time and workload pressures an employee perceives in the work place.

System Maintenance and System Change Dimensions

7. Clarity of expectations as they apply to an employee's job description and the organization's policies and procedures.

8. Control measures the amount of control management exerts on the employees by documented rules and regulations and unwritten expectations.

9. Innovation measures how much management values new ideas, creativity, and change.

10. Physical Comfort subscale measures aspects such as decor and lighting, that affect the immediate work environment of the employee.

There are nine questions for each of the subscales that measure both positive and negative aspects of the work environment. Written at the sixth-grade level, it was estimated that the staff RNs would require 10-15 minutes to complete the WES (Moos, 1987).

Psychometric assessments conducted by the developers of the WES established the instrument's validity and reliability (Moos, 1986). Used in a variety of work settings, including the health care work environment, normative data were obtained on over 3000 subjects. The use of this tool in the health care work environment has established its validity (Flarey, 1991; Moos, 1987). The internal consistency of the WES was documented by the developers (Moos, 1986) through the use of Cronbach's alpha. An internal consistency range of .69 for peer cohesion to .86 for innovation was reported. This shows a moderate to strong level of internal consistency and is satisfactory for most uses (Polit & Hungler, 1991, p. 373). Reliability for this instrument was examined through test-retest use on four different work groups (Moos, 1987). Intercorrelations for the subscales ranged from .69 for clarity to .83 for involvement. These correlation coefficients are also in the acceptable range (Polit & Hungler, 1991, p. 374).

Data Analysis

Background variables were summarized using descriptive statistics to describe the sample group. Having met the assumptions of normality and homogeneity of variance, a *t*-test was done to compare the ages (independent variable) of the staff RNs who stayed and the staff RNs who left the unit or hospital (dependent variable). To compare the two groups for differences in years in nursing and salary (independent variables), the Mann-Whitney U test was used, as the data violated the assumptions of the *t*-test. Because the frequency assumption was not met, the chi square statistic could not be used to analyze differences in educational level (independent variable) between the two groups of staff RNs (dependent variable). A contingency table and Cramer's V were used for this analysis.

For each subscale of the WES, mean scores were calculated for the two subject groups. To examine the differences in perceptions of work environment between the staff RNs who stayed and the staff RNs who left, *t*-tests and Mann-Whitney U tests were conducted. A *t*-test was utilized to analyze differences in WES scores between the two RN groups (dependent variable) for peer cohesion, supervisor support, autonomy, clarity, control, innovation, and physical comfort scores (independent variable). A Mann-Whitney U test was performed between the involvement, task orientation, and work pressure scores (independent variable) of the two RN groups (dependent variable) when the assumptions were violated. The level of significance was set at $p = .05$. The Statistical Package for the Social Sciences (SPSS/PC+) was used for the statistical analyses.

Limitations

This study is limited by design, instrument, and sample. Although the staff RNs were followed over a period of 2 years to establish retention data, the initial questionnaires represent a cross-sectional design. It was assumed that the responses the staff RNs gave at the time the questionnaire was completed in Fall 1991 regarding their intentions of leaving, and what would influence their decision to leave, were valid 6 months to 24 months later. The decision to stay or leave their unit/hospital may have been based on a different set of circumstances. Changes occurring in the work environment over the period of the study could also affect the outcome. Another limitation of the correlational, non-experimental design is that no cause and effect relationship can be inferred from the results.

The questionnaire used to gather background data was developed by the primary researchers for use in this study. It was assumed that the subjects responded to this questionnaire truthfully. The WES, a widely used tool, has been used in hospital work environments. It remains, however, a self-report tool, and thus relies on the honesty of the participants' responses to yield valid results. Both instruments pose a threat to the internal validity of this study.

The sample size was 34 for the staff RNs who left the unit/hospital. A larger sample may yield different results. All subjects were recruited from one large county hospital in the San Francisco Bay Area. The results should be generalized with caution to populations from other geographic areas or to nurses working in different health care facilities.

Chapter 4

ANALYSIS AND INTERPRETATION OF THE DATA

In this chapter the data analyses, findings, and an interpretation of these findings are presented. The group of RNs who left their unit/hospital (leave group, n = 34) and the group of RNs who remained employed at their unit/hospital (stay group, n = 171) are described using the background characteristics selected for study. Data for both groups are compared using an independent t-test or a Mann-Whitney U test for a statistically significant difference between groups for age, years in nursing, and salary. Educational level is presented for both RN groups. Perceptions of work environment, as measured by the WES, are presented, and the WES subscale scores are compared and interpreted.

Description of the Sample

The two RN groups are described using their background characteristics of age, years in nursing, salary, and educational level. Tables summarizing these findings are included.

Age: Leave and Stay Comparisons

The mean age for the group of RNs who left their unit/hospital was 37.7 years (SD = 8.7) with a range of 26-58 years. The majority of the RNs (n = 18, 52.9%) were in their thirties. Nine RNs (26.5%) were in their forties.

The mean age of the RNs who remained employed at the hospital was 38.5 (SD = 8.7). The range was 24-65 years with the largest number of RNs (n = 66, 38.6%) being in their thirties. Those RNs in their forties were the next largest group (n = 49, 28.7%).

Table 1

Age Comparisons for Leave and Stay (N=205)

Age Groups	Leave (n=34)		Stay (n=171)	
	n	%	n	%
20-29	3	8.8%	35	20.5%
30-39	18	52.9%	66	38.6%
40-49	9	26.5%	49	28.7%
50-59	4	11.8%	10	5.8%
60-69	0		4	2.3%
Missing Data	0		7	4.1%
Mean (SD)	37.7 (8.7)		38.5 (8.7)	
Range	26-58 years		24-65 years	
t-test	t = .47		p =.64	

Because the data met the assumptions of normality and homogeneity of variance, a t-test was done. The t-test revealed no statistically significant difference, $t(196) = .47$, $p = .64$, in age between groups. Table 1 summarizes these findings.

Years in Nursing: Leave and Stay Comparisons

The mean for years spent in nursing was 11.6 years for the leave group with a standard deviation of 11.3. The range for years in practice was 0.5 to 39.5 years. Over half of these RNs (n = 18, 52.9%) had been working in the nursing

Table 2

Years in Nursing Comparisons for Leave and Stay (N=205)

Years in nursing	Leave (n=34)		Stay (n=171)	
	n	%	n	%
0-10	18	52.9%	90	52.6%
11-20	9	26.5%	43	25.1%
21-30	3	8.8%	17	9.9%
31-40	3	8.8%	9	5.3%
>40	0		3	1.8%
Missing Data	1	2.9%	9	5.3%
Mean (SD)	11.6 (11.3)		12.3 (9.8)	
Range	.5-39.5 years		1-49 years	
Mann-Whitney	z = .96		p =.34	

Note. Percentages may not total 100% due to rounding.

profession 0-10 years. Nine RNs (26.4%) had 11-20 years experience and 3 RNs (8.8%) had 21-30 years experience.

The stay group had a mean of 12.3 years of experience in nursing (SD = 9.8) with a range of 1-49 years. Over half of the RNs (n = 90, 52.6%) had been practicing nursing for 10 years or less. Another 25% (n = 43) had 11-20 years of experience, and 9.9% (n = 17) had 21-30 years of experience.

A Mann-Whitney U test was performed. No statistically significant difference, $z = .96$, $p = .34$, was found between the leave group and the stay group for years spent in nursing. Table 2 summarizes these data.

Salary: Leave and Stay Comparisons

The hourly salary for the leave group ranged from $17.00-$28.00. The mean salary was $22.38 per hour (SD = 3.5). Ten nurses (29.4 %) had an hourly salary of $20.00-$22.00 per hour. Nine RNs (26.5%) earned $17.00-$19.00 per hour, and 8 RNs (23.5%) earned $23.00-$25.00 per hour. Seven RNs (20.5%) were earning $26.00-$29.00 per hour.

The salary range for the stay group was $17.00-$29.00 per hour. Mean hourly salary was $23.66 per hour (SD = 2.8). The largest group of RNs ($n = 74$, 43.2%) reported hourly earnings of $23.00-$25.00. Forty RNs (23.4%) made $20.00-$22.00 per hour, and 42 (24.6%) of the RNs earned $26.00-$29.00 per hour at the time of data collection.

A Mann-Whitney U test was done to compare groups. A statistically significant difference between groups for salary, $z = 2.06$, $p = .04$, was found. A summary of these findings may be found in Table 3.

Educational Level

Data on educational level were collected and are summarized in Table 4. For the leave group, half of the RNs ($n = 17$, 50%) had earned an associate degree in nursing (ADN). Eleven RNs (32.4%) had completed their bachelor of science in nursing (BSN), and 4 nurses (11.8%) in this group had achieved a master of science in nursing degree (MSN) or higher.

The stay group had 60 RNs (35.1%) with an associate degree in nursing. The largest group of RNs ($n = 75$, 43.9%) had a BSN, and 28 (16.4%) had attended a

Table 3

Salary Comparisons for Leave and Stay (N=205)

Hourly Salary	Leave (n=34)		Stay (n=171)	
	n	%	n	%
$17-$19	9	26.5%	15	8.8%
$20-$22	10	29.4%	40	23.4%
$23-$25	8	23.5%	74	43.3%
$26-$29	7	20.6%	42	24.5%
Mean (SD)	$22.38 (3.5)		$23.66 (2.8)	
Range	$17.00-$28.00		$17.00-$29.00	
Mann-Whitney	z = 2.06		p =.04	

diploma program. Six RNs (3.5%) held an MSN or higher.

The nominal level data collected for the educational level variable required the use of a chi square statistic. Because the data failed to meet the cell frequency assumption, the Cramer's V was the only statistic available for comparison. The Cramer's V=.24 demonstrated only a weak correlation between educational level of the RNs who left and the educational level of the RNs who stayed on their unit/hospital.

Summary of Background Characteristics

The RNs who left their unit/hospital and the RNs who stayed employed on their unit/hospital showed no statistically significant differences with respect to

Table 4

Educational Level Comparisons for Leave and Stay (N=205)

	Leave (n=34)		Stay (n=171)		Totals	
	n	%	n	%	n	%
Diploma	1	2.9	28	16.4	29	14.1
ADN	17	50.0	60	35.1	77	37.6
BSN	11	32.4	75	43.8	86	41.9
MSN	4	11.8	6	3.5	10	4.9
Missing data	1	2.9	2	1.2	3	1.5

Note. Cells with expected frequency < 5 = 50%. Cramer's V = .24162.

age and years in nursing. A statistically significant difference was demonstrated between the two groups for salary. A weak correlation was demonstrated when educational level was compared for the two groups of RNs.

WES Subscale Comparisons

WES scores are compared for both groups of nurses by subscale. The data analyses and findings for these comparisons are discussed below and summarized in Table 5.

Involvement

The involvement subscale of the WES reflects the level of job commitment and how connected the employee feels to his or her organization. The mean score for this subscale was 6.4 (SD = 2.0) for the leave group, and 6.4 (SD = 2.3) for the stay group. Both groups were within the normed average range of 5.5-6.5. A Mann-Whitney U test revealed no statistically significant difference, z = .43,

Table 5

Comparison of WES Subscale Scores (N = 205)

Subscales	Normed Average Range	Leave (n=34) M (SD)	Stay (n=171) M (SD)	t-test or Mann-Whitney
Involvement	5.5-6.5	6.4 (2.0)	6.4 (2.3)	z = .43, p = .67
Peer Cohesion	5.5-6.0	6.2 (2.1)	6.4 (2.0)	t = .34, p = .74
Supervisor Support	5.5-6.0	5.9 (2.6)	5.5 (2.3)	t = .90, p = .37
Autonomy	5.0-6.0	6.2 (1.7)	5.8 (1.9)	t = 1.12, p = .26
Task Orientation	5.5-6.0	6.4 (1.8)	6.5 (1.9)	z = .57, p = .57
Work Pressure	4.0-5.0	5.7 (3.0)	5.7 (2.5)	z = .34, p = .74
Clarity	5.5-6.0	6.3 (1.9)	5.7 (2.2)	t = 1.36, p = .17
Control	4.5-5.0	5.7 (2.1)	6.1 (1.7)	t = 1.12, p = .26
Innovation	4.0-5.0	4.4 (2.4)	4.2 (2.4)	t = .64, p = .53
Physical Comfort	4.5-5.0	4.8 (2.5)	3.9 (2.7)	z = 1.81, p = .07

p = .67, between the group of RNs who left their unit/hospital and the group of RNs who stayed.

Peer Cohesion

The peer cohesion subscale measures the perceived support and interpersonal relationships among colleagues. The mean score for the leave group on this subscale was 6.2 (SD = 2.1), and 6.4 (SD = 2.0) for the stay group. Both RN groups perceived the work environment to be slightly more cohesive than the normed average range of 5.5-6.0. A t-test was done and revealed no statistically significant difference, $t(203) = .34$, $p = .74$, between groups for this subscale.

Supervisor Support

Supervisor support reflects the degree of support an employee receives from supervisors. The degree of support that is present among peers is also measured by this subscale. The leave group had a mean score of 5.9 (SD = 2.6) and the stay group had a mean score of 5.5 (SD = 2.3). Both groups were in the normed average range of 5.5-6.0 for this subscale. A t-test was done and no statistically significant difference, $t(203) = .90$, $p = .37$, was discovered between groups.

Autonomy

The autonomy subscale measures the extent that an employee is allowed to make decisions and function independently. Mean score for the autonomy subscale was 6.2 (SD = 1.7) for the leave group. The stay group had a mean of 5.8 (SD = 1.9). The leave group's perceptions of autonomy in the work environment were above the normed average range of 5.0-6.0, while the stay

group scored within the normed average range for this subscale. A t-test showed no statistically significant difference, $t(203) = 1.12$, $p = .26$, between groups.

Task Orientation

Task orientation measures the employees' perception of the establishment's emphasis on organization, planning, and goal completion. Task orientation responses for the leave group revealed a mean score of 6.4 (SD = 1.8). The stay group had a mean score of 6.5 (SD = 1.9). Both groups scored above the normed average range of 5.5-6.0. A Mann-Whitney U test failed to demonstrate a statistically significant difference $z = .57$, $p = .57$ between groups.

Work Pressure

Work pressure is the amount of time pressure and workload pressure an employee perceives in the work place. The mean score was 5.7 (SD = 3.0) for the leave group and was 5.7 (SD = 2.5) for the stay group. Both groups scored above the normed average range of 4.0-5.0 on this subscale. No statistically significant difference was found between these groups for work pressure with the Mann-Whitney U test ($z = .34$, $p = .74$).

Clarity

The clarity subscale measures the expectations of the company and how well the employee is informed of them. These expectations are communicated through the employees' job descriptions and organizational policies and procedures. The leave group had a mean score of 6.3 (SD = 1.9). The stay group had a mean score of 5.7 (SD = 2.2). The leave group scored above the normed average range of 5.5-6.0, and the stay group scored within the normed average range. A t-test showed no statistically significant difference, $t(203) = 1.36$, $p = .17$, between groups.

Control

The scores on the control subscale reflect the amount of control management exerts on an employee. Control is manifested in the documented rules, regulations, and unwritten expectations of an organization. Mean scores were 5.7 (SD = 2.1) for the leave group and 6.1 (SD = 1.7) for the stay group. The leave group's perceptions of control in the work environment were above the normed average range of 4.5-5.0. The stay group's perceptions of control by management in the work environment were well above this normed average range (Moos, 1989). No statistically significant difference, $t(203) = 1.12$, $p = .26$, was found between the groups for this subscale.

Innovation

The innovation subscale measures how much management values new ideas, creativity, and change. The leave group had a mean score of 4.4 (SD = 2.4), and the stay group had a mean score of 4.2 (SD = 2.4). Both groups were within the normed average range of 4.0-5.0 for this subscale. A t-test yielded $t(203) = .64$, $p = .53$ with no statistically significant difference between the groups.

Physical comfort

The physical comfort subscale measures the employees' perceptions of their immediate work environment. Decor, lighting, and adequate work space are aspects of the work environment considered on the physical comfort subscale. Mean scores for the leave group were 4.8 (SD = 2.5), and for the stay group the mean was 3.9 (SD = 2.7). The leave group's perception of comfort in the work environment was in the normed average range of 4.5-5.0. The stay group however, ranked the physical comfort of the work place well below the normed

average (Moos, 1989). A t-test for this subscale also revealed no significant difference, $t(203) = 1.81$, $p = .07$, between groups.

Summary of WES Subscale Comparisons

The WES subscale scores yielded no statistically significant differences between the RNs who left their unit/hospital and the RNs who remained employed on their unit/hospital. Both groups scored within the normed average range on the involvement, supervisor support, and innovation subscales. The two RN groups scored above average on the peer cohesion, task orientation, work pressure, and control subscales. The leave group scored above the normed average range on the autonomy and clarity subscales, and within the normed average range for physical comfort. The stay group scores were below the normed average range on the physical comfort subscale, and within the normed average range for autonomy and clarity.

Summary

In this chapter, the study sample was described and compared using the background characteristics of age, years in nursing, salary, and educational level. No significant differences were found between the group of RNs who left their unit/hospital and the RNs who stayed employed on their unit/hospital for age, years in nursing, and educational level. A Mann-Whitney U test demonstrated a statistically significant difference, $z = 2.06$, $p = .04$, between the two RN groups with respect to salary.

The two RN groups were also compared for differences in perceptions of their work environment. No statistically significant differences were found between groups for scores on the 10 WES subscales. However, both groups varied from the normed average range of WES scores on several subscales. The leave

group scored above average on the peer cohesion, autonomy, task orientation, work pressure, clarity, and control subscales. The stay group scores were below the normed average range on the physical comfort subscale, and above the normed average range on the peer cohesion, task orientation, work pressure, and control subscales.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

Summary of Study

This thesis compared a group of nurses who left their unit or hospital with a group of nurses who remained on their unit during the 2-year period of study. The two RN groups were examined for differences in background characteristics and differences in perceptions of work environment. A background questionnaire developed by the primary researchers and the WES was distributed to nurses at a large urban hospital in Fall 1991. Retention data were obtained at 6-month intervals for a 2-year period. The group of RNs who left their unit/hospital over this period comprised the leave group (n=34). The 171 nurses who responded to the original questionnaire and who remained employed on their unit were the stay group. Differences between groups were examined by a *t*-test or Mann-Whitney U test for the background characteristics of age, years in nursing, and salary. Educational level was examined by use of a contingency table and Cramer's V. A statistically significant difference ($z = 2.06$, $p = .04$) was demonstrated between groups for salary.

The perceptions of work environment for both groups were examined utilizing the WES Form R. WES scores for both groups were within the normed average range on the involvement, supervisor support, and innovation subscales. The leave group scored above average on peer cohesion, autonomy, task orientation, work pressure, clarity, and control. The stay group scores were below the normed average range on the physical comfort subscale, and above the normed average range on the peer cohesion, task orientation, work pressure, and control

subscales. No statistically significant differences were found between the two groups for perceptions of work environment.

Conclusions

Background Characteristics

Based on the comparison of background characteristics, the two RN groups appear very similar. No statistically significant differences were discovered between groups for age, years in nursing, and educational level. The statistically significant difference demonstrated between groups for salary, $1.28 more for mean hourly salary for the stay group, although seemingly not a large difference, may influence an RN's decision to leave or to stay. A high salary has been equated with an increased level of job commitment and a decreased turnover rate (Pfeffer, 1994). Multiple economic factors were present during the course of this study such as the economic recession and the end of the nursing shortage. In these turbulent times even minor increases in salary may become important. The increase in single parent households and the number of spouses being laid off from the electronics industry are also confounding variables. Thus salary might play a role in an RN's decision to leave or stay.

Perceptions of Work Environment

No statistically significant difference was demonstrated between the two RN groups for perceptions of work environment. However, the groups differed from the normed average range, and each other, on several subscales.

Peer Cohesion. Both groups scored above the normed average range suggesting that nurses at this hospital valued the support of their colleagues and perceived a high degree of peer support. This reflects a work environment that promotes team work.

Task Orientation. Both groups scored above the normed average range reflecting a work environment focused largely on task completion and getting the job done. Nursing is a task oriented profession, especially in the acute care environment. The emphasis on making beds, administering medications, and completing treatments on a rigid time schedule lends itself to this type of atmosphere. The trend away from primary care nursing will likely continue the perception of having a task-oriented environment.

Work Pressure. Again, both RN groups scored above the normed average range. The sense of work pressure and time urgency RNs experience is great. With 8-12 hours in which to accomplish a myriad of tasks aimed at restoring a group of patients to an optimal level of health and well-being, nurses are attempting to meet the psychosocial and developmental needs of their clients as well. The dilemma of whether to begin charting or visit with a depressed, anxious, or lonely patient can contribute to a nurse's sense of work pressure. The facility's emphasis on completing tasks, as noted above, adds to the sense of work pressure.

Control. The perception of management control was also above the normed average range for both the stay and leave groups. The sense of having numerous rules and regulations to follow without having an adequate voice in the process affects the overall work environment.

Physical Comfort. The stay group perceived the work environment below the normed average range. For this group of RNs, although dissatisfied with the physical environment, this perception did not appear to influence the leave or stay decision.

Clarity. The leave group scored above the normed average range on this subscale. Their perceptions of how clearly their job expectations were communicated to them were higher than for the stay group. Clear expectations from nursing supervisors has been seen as a positive factor in other studies (Moos & Schaefer, 1987) If seen as a benchmark they could never measure up to, then perhaps clarity would be seen as a negative factor and enter into the decision to leave or stay.

In conclusion, the motivation underlying an RN's decision to leave or stay on the unit are complex. The group of nurses who left their unit were not interviewed regarding their reasons for quitting nor were their initial questionnaires examined for intent to leave.

Circumstances can change dramatically over a 2-year time span. The proclamation of the end to the nursing shortage of the late 1980s (Gray, 1992a; Mattera, 1993) and the economic recession of the early 1990s could have a stronger effect on the decision to leave or stay than factors in the work environment. Downsizing in local companies over the course of the study altered the family and financial circumstances of many Bay Area residents. Factors such as a sole-support RN needing to work to maintain family finances may override the negative effects of a poor work environment, and may have provided a strong confounding variable for this study.

Recommendations

The results of this study must be generalized with caution to other RN groups. The RNs under study were from one large urban hospital on the west coast, and the sample size, particularly of the leave group, was small.

With America facing the aging of its population, including nurses in its health industry, several changes can be expected during the next decade. Older, sicker patients will be needing hospital care at a time when a large portion of the RN work force will be retiring (Gray, 1992a; Mattera, 1993). History has shown nursing shortages to be cyclical in nature (Helmer & McKnight, 1988; Gray, 1992a). By continuing to examine aspects of the work environment that affect RN retention, new ways of recruiting and retaining experienced nurses can be developed to prepare for the next shortage. The change in the health care industry over the past several years has impacted hospitals and their staffs. Replicating this study during a more stable time--economically as well as within the health care industry itself--is not probable in the forseeable future. Therefore, replicating the study at another hospital with a larger sample size could serve to validate these findings.

With the current trend toward managed care, more nurses will move from the acute care environment into ambulatory care and home health care. Studies examining these work environments should also be undertaken. Follow-up studies of health care agencies that have implemented changes based on aspects of the work environment delineated by the WES and examination of retention data should be undertaken. Educating undergraduates and graduate nursing students in the effect of the work environment on the nursing staff, may help RNs find a more suitable place of employment. Expanding the research base regarding how RNs' work environment affects job satisfaction, retention, and patient care outcomes will enable nurse managers, nurse educators, and nurse clinicians to continue to meet the health care needs of a changing society.

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APPENDIX A

Human Subjects Approval

SJSU SAN JOSE STATE UNIVERSITY

A campus of The California State University

Office of the Academic Vice President • *Associate Academic Vice President* • *Graduate Studies and Research*
One Washington Square • San José, California 95192-0025 • 408/924-2480

To: Jayne Cohen and Coleen Saylor
Department of Nursing
San Jose State University

From: Serena W. Stanford Serena W. Stanford
AAVP, Graduate Studies and Research

Date: May 20, 1992

The Human Subjects-Institutional Review Board has approved your request for minor changes, dated May 14, 1992, to add Diane Stuenkel to the approved human subjects protocol entitled:

"Staff Nurse Work Setting Study"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have questions, please contact me at 408-924-2480.

APPENDIX B

Subject's Consent

SJSU SAN JOSE STATE UNIVERSITY

School of the Applied Arts and Sciences • *Department of Nursing*
One Washington Square • San Jose, California 95192-0057 • 408/924-3130

SANTA CLARA VALLEY MEDICAL CENTER

Staff Nurses' Work Setting Study

Enclosed is a packet of materials, including a demographic data sheet and a Work Environment Scale. You will be asked about the perceptions you have of your work environment. The purpose of this study is to understand and improve the settings in which nurses work. Your participation is important.

Our country faces an increasing shortage of RNs, whom hospitals must be able to attract and retain if we are to continue to enjoy a high standard of nursing care. Most studies focus on the nursing shortage without attending to the forces, such as the quality of the work setting, that perpetuate it. Should you choose to participate, you will be making a substantial contribution to nursing, a contribution that we believe can help nurse administrators, managers, and bedside nurses develop up-to-date decisions about work settings in acute care areas.

We estimate that the questionnaire will require 20 minutes to complete. Findings of the investigation will be made available to participants at the end of the study. Thank you for your participation in this research effort; it will enhance the understanding of nurses' work settings.

SJSU SAN JOSE STATE UNIVERSITY

School of the Applied Arts and Sciences • *Department of Nursing*
One Washington Square • San Jose, California 95192-0057 • 408/924-3130

SANTA CLARA VALLEY MEDICAL CENTER

Subject's Consent

TITLE OF PROJECT: Staff Nurse Work Setting Study

PRINCIPAL INVESTIGATORS: Jayne Cohen, DNSc, RN, Tel. 408/924-1325; Coleen Saylor, PhD, RN, Tel. 408/924-1321 Department of Nursing, San Jose State University, One Washington Square, San Jose, CA 95192.

PURPOSE: You are invited to participate in a study about the settings in which professional staff nurses work. The goal is to provide the most beneficial work environment for nurses who work at the bedside in acute care hospitals. Your participation will help to gather important information regarding your perceptions about your specific work setting.

PROCEDURE: If you decide to participate, you will complete the attached questionnaires and return them in the enclosed envelope. They will take approximately 30 minutes. In addition, in the following 12-24 months any changes in your employment status will be recorded.

RISKS/DISCOMFORTS: There are no known risks associated with your participation in the study. Your responses are confidential. Should you feel uncomfortable about the questionnaires, you can contact one of the investigators.

BENEFITS: By participating in this study, you will be contributing to knowledge about nurses' work settings. This information may be useful in improving work settings. We cannot and do not guarantee or promise that you will receive any benefits from the study. A summary of the findings will be available to all participants.

ALTERNATIVES: You are under no obligation to take part in this study, and you may refuse to do so if you wish; you may withdraw from the study at any time.

COSTS: Your participation in this study is on a voluntary basis and does not involve any cost to you.

CONFIDENTIALITY: Individual responses are strictly confidential and only the investigators and graduate assistants from San Jose State University will have access to the information. The only identification is a code number that can be matched to a list of names. The list of names, code numbers and the questionnaires are kept locked at San Jose State University and will be destroyed when the study is complete. Your responses will be combined with those of other staff nurses, and all data will be reported as group data, therefore, assuring anonymity.

COMPENSATION: It is the policy of the California Institute for Medical Research and Santa Clara Valley Medical Center not to provide reimbursement for medical care or any form of compensation in the event of physical or psychological injury sustained in the course of this research project. If injury does occur, you may contact Dr. Jayne Cohen or Dr. Coleen Saylor to determine what alternatives for care are available.

SUBJECT/PATIENT RIGHTS: I understand that I am free to withdraw my consent and discontinue participation in the project at any time without prejudice to me or effect on this research study. My questions have been answered, and should I have additional questions I may contact Dr. Cohen (408/924-1325 or Dr. Saylor (408/924-1321). If I am not satisfied with the manner in which this study is being conducted, I may contact the Research and Human Subjects Review Committee which is concerned with protection of volunteers in research projects. The Committee may be reached by calling the office from 8:00 a.m. to 5:00 p.m., Monday through Friday, at 408/998-4554, ext. 15, or by writing to the Research Committee, California Institute for Medical Research, 2260 Clove Drive, San Jose, California 95128.

I hereby voluntarily consent and offer to take part in the study. Returning the questionnaire constitutes my consent. This consent form is for my personal records.

IRB Approval # 1/25/91-04

APPENDIX C

Background Characteristics Data Collection Form

Staff Nurse Work Setting Study

Background Information

1. Gender: _____ Female _____ Male
2. Age _____
3. Ethnic background: _____ African-American _____ Asian-American
   _____ Caucasian _____ Hispanic
   _____ American Indian _____ Other

4. Marital Status: _____ Single
   _____ Married
   _____ Separated/Divorced
   _____ Widowed

5. Number of children: _____ Ages of children:_____

6. If you use child care services, how dependable are they?
   _____ Very dependable
   _____ Usually dependable
   _____ Sometimes dependable
   _____ Rarely dependable

7. Highest nursing degree completed:_____

8. Are you currently enrolled in an academic program leading to a degree?
   _____ yes _____ no
   If yes, please describe_____

9. How long have you been a registered nurse?
   _____ years, _____ months

10. How long have you been in your present position?
    _____ years, _____ months

11. What is your clinical level (I, II, III, IV or V)? _____

12. Have you been or are you currently functioning as a
    charge nurse? _____ yes _____ no
    assistant head nurse? _____ yes _____ no

13. In what unit do you work most frequently? _____

14. On the average, how many hours do you work per week?_____

Thank you for taking the time to complete this questionnaire. Your responses will contribute to a better understanding of improved work arrangements for nurses.

APPENDIX D

Work Environment Scale-Form R